



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board
Division of Drinking Water

Certified Mail
7012 3460 0003 1113 1021

December 17, 2014

City of Mt. Shasta
305 N. Mt. Shasta Blvd.
Mt. Shasta, CA 96067

Attn: Rod Bryan, Public Works Director

CITATION NO. 01_01_14C_006 FOR VIOLATION OF MAXIMUM CONTAMINANT LEVEL FOR
TOTAL COLIFORM BACTERIA, CITY OF MT. SHASTA, SYSTEM #4710008

Enclosed is a citation issued to the City of Mt. Shasta for violating the maximum contaminant level for coliform bacteria during the month of November 2014. The order specifies action to be taken by the City of Mt. Shasta to achieve compliance and avoid future civil penalties.

Section 116577 of the California Safe Drinking Water Act provides for our department to be reimbursed by the public water system for costs incurred for preparing and issuing an enforcement action to that system. Therefore, your water system will be billed for the preparation and issuance of this order. Our costs are approximately \$128 per hour. At this time we have spent approximately two hours on enforcement activities associated with this violation. You will receive a bill for these costs in August, following the end of the State's fiscal year, from our Fee Billing Unit in Sacramento.

Should you have any questions, please contact me at (530) 224-4872 or Barry Sutter at (530) 224-4875.

A handwritten signature in cursive script that reads "Tony Wiedemann".

Tony Wiedemann, P.E.
Klamath District Engineer
DRINKING WATER FIELD OPERATIONS BRANCH

Enclosures

cc: Richard Hinrichs, Chief – DDW – Northern California Section

1 The State Water Resources Control Board (hereinafter "State Board"), acting by and
2 through its Division of Drinking Water (hereinafter "Division") and the Deputy Director for
3 the Division (hereinafter "Deputy Director"), hereby issues a citation to the City of Mt.
4 Shasta for violation of Maximum Contaminant Levels for Total Coliform Bacteria, Section
5 64426.1(a), California Code of Regulations (CCR)

6
7 **APPLICABLE AUTHORITIES**

8 **Section 64426.1 (Total Coliform Maximum Contaminant Level), CCR states in**
9 **relevant part:**

10
11 (b) A public water system is in violation of the total coliform MCL when any of the
12 following occurs:

13 (1) For a public water system which collects at least 40 samples per month, more
14 than 5.0 percent of the samples collected during any month are total coliform-
15 positive; or

16 (2) For a public water system which collects fewer than 40 samples per month, more
17 than one sample collected during any month is total coliform-positive; or

18 (3) Any repeat sample is fecal coliform-positive or E. coli-positive; or

19 (4) Any repeat sample following a fecal coliform-positive or E. coli-positive routine
20 sample is total coliform-positive.

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22 A copy of additional *Applicable Authorities* is located in Appendix 1, which is attached
23 hereto and incorporated by reference.

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1 in accordance with Article 18, Section 64463 through Section 64465, CCR, which
2 relevant parts are included in Appendix 1 *Applicable Authorities*.

3
4 3. The City of Mt. Shasta shall complete Appendix 3: *Compliance Certification*. The
5 City of Mt. Shasta shall submit the *Compliance Certification* with a copy of the *Public*
6 *Notification* and the laboratory results from sampling required by Directive 3 to the
7 Division on or before **January 31, 2015**.

8
9 4. The City of Mt. Shasta shall submit to the Division the information described in
10 Title 22, CCR Section 64426 (b)(2) on or before **January 31, 2015**. Appendix 4:
11 *Positive Total Coliform Investigation*, which is attached to this document and may be
12 used to fulfill this directive.

13
14 All submittals required by this citation shall be submitted to the Division of Drinking Water
15 at the following address:

16
17
18 Tony Wiedemann, P.E.
19 Klamath District Engineer
20 364 Knollcrest Drive, Suite 101
21 Redding CA, 96002
22
23
24
25
26
27

1 The Division reserves the right to make such modifications to this citation as it may deem
2 necessary to protect public health and safety. Such modifications may be issued as
3 amendments to this citation and shall be effective upon issuance.

4
5 Nothing in this Citation relieves the City of Mt. Shasta of its obligation to meet the
6 requirements of the California Safe Drinking Water Act (CHSC, Division 104, Part 12,
7 Chapter 4, commencing with Section 116270), or any regulation, standard, permit or
8 order issued thereunder.

9
10 **PARTIES BOUND**

11 This citation shall apply to and be binding upon City of Mt. Shasta, its owners,
12 shareholders, officers, directors, agents, employees, contractors, successors, and
13 assignees.

14
15 **SEVERABILITY**

16 The Directives of this citation are severable, and City of Mt. Shasta shall comply with
17 each and every provision thereof notwithstanding the effectiveness of any provision.

18
19 **FURTHER ENFORCEMENT ACTION**

20 The California SDWA authorizes the Division to issue a citation or compliance order with
21 assessment of administrative penalties to a public water system for violation or continued
22 violation of the requirements of the California SDWA or any permit, regulation, permit or
23 order issued or adopted thereunder including, but not limited to, failure to correct a
24 violation identified in a citation or compliance order. The California SDWA also
25 authorizes the Division to take action to suspend or revoke a permit that has been issued
26 to a public water system if the system has violated applicable law or regulations or has
27 failed to comply with an order of the Division; and to petition the superior court to take

1 various enforcement measures against a public water system that has failed to comply
2 with an order of the Division. The Division does not waive any further enforcement action
3 by issuance of this citation or compliance order.
4

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6

7 Tony Wiedemann, P.E., District Engineer
8 Klamath District
9 State Water Resources Control Board
10 Drinking Water Field Operations Branch

11 Dec. 17, 2014

12 Date

13 Appendices (4):

- 14 1. Applicable Authorities
15 2. Public Notification Template
16 3. Compliance Certification
17 4. Positive Total Coliform Investigation

18 Certified Mail No. 7012 3460 0003 1113 1021
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APPENDIX 1:
APPLICABLE AUTHORITIES
For Violation of MCL for Total Coliform Rule
Community Water System
Less than 40 samples/Month

Section 116271 of the CHSC states in relevant part:

(a) The State Water Resources Control Board succeeds to and is vested with all of the authority, duties, powers, purposes, functions, responsibilities, and jurisdiction of the State Department of Public Health, its predecessors, and its director for purposes of all of the following:

- (1) The Environmental Laboratory Accreditation Act (Article 3 (commencing with Section 100825) of Chapter 4 of Part 1 of Division 101).
- (2) Article 3 (commencing with Section 106875) of Chapter 4 of Part 1.
- (3) Article 1 (commencing with Section 115825) of Chapter 5 of Part 10.
- (4) This chapter and the Safe Drinking Water State Revolving Fund Law of 1997 (Chapter 4.5 (commencing with Section 116760)).
- (5) Article 2 (commencing with Section 116800), Article 3 (commencing with Section 116825), and Article 4 (commencing with Section 116875) of Chapter 5.
- (6) Chapter 7 (commencing with Section 116975).
- (7) The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Division 43 (commencing with Section 75001) of the Public Resources Code).
- (8) The Water Recycling Law (Chapter 7 (commencing with Section 13500) of Division 7 of the Water Code).
- (9) Chapter 7.3 (commencing with Section 13560) of Division 7 of the Water Code.
- (10) The California Safe Drinking Water Bond Law of 1976 (Chapter 10.5 (commencing with Section 13850) of Division 7 of the Water Code).
- (11) Wholesale Regional Water System Security and Reliability Act (Division 20.5 (commencing with Section 73500) of the Water Code).
- (12) Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 (Division 26.5 (commencing with Section 79500) of the Water Code).

(b) The State Water Resources Control Board shall maintain a drinking water program and carry out the duties, responsibilities, and functions described in this section. Statutory reference to "department," "state department," or "director" regarding a function transferred to the State Water Resources Control Board shall refer to the State Water Resources Control Board. This section does not impair the authority of a local health officer to enforce this chapter or a county's election not to enforce this chapter, as provided in Section 116500.

- ...
- (k) (1) The State Water Resources Control Board shall appoint a deputy director who reports to the executive director to oversee the issuance and enforcement of public water system permits and other duties as appropriate. The deputy director shall have public health expertise.
- (2) The deputy director is delegated the State Water Resources Control Board's authority to provide notice, approve notice content, approve emergency notification plans, and take other action pursuant to Article 5 (commencing with Section 116450), to issue, renew, reissue, revise, amend, or deny any public water system permits pursuant to Article 7 (commencing with Section 116525), to suspend or revoke any public water system permit pursuant to Article 8 (commencing with Section 116625), and to issue citations, assess penalties, or issue orders pursuant to Article 9 (commencing with Section 116650). Decisions and actions of the deputy director taken pursuant to Article 5 (commencing with Section 116450) or Article 7 (commencing with Section 116525) are

deemed decisions and actions taken, but are not subject to reconsideration, by the State Water Resources Control Board. Decisions and actions of the deputy director taken pursuant to Article 8 (commencing with Section 116625) and Article 9 (commencing with Section 116650) are deemed decisions and actions taken by the State Water Resources Control Board, but any aggrieved person may petition the State Water Resources Control Board for reconsideration of the decision or action. This subdivision is not a limitation on the State Water Resources Control Board's authority to delegate any other powers and duties.

Section 116650 of the CHSC states in relevant part:

- (a) If the department determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the department may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The department may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

Section 64424 of the CCR states in relevant part:

- (d) If a public water system for which fewer than five routine samples/month are collected has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month. If the supplier stops supplying water during the month after the total coliform-positive(s), at least five samples shall be collected during the first month the system resumes operation. A water supplier may request the Department waive the requirement to collect at least five routine samples the following month, but a waiver will not be granted solely on the basis that all repeat samples are total coliform-negative. To request a waiver, one of the following conditions shall be met:
 - (1) The Department conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect public health.
 - (2) The Department determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one routine sample before the end of the next month it serves water to the public and use it to determine compliance with §64426.1.

Section 64426 of the CCR states in relevant part:

- (a) Any of the following criteria shall indicate a possible significant rise in bacterial count:
 - (1) A system collecting at least 40 samples per month has a total coliform-positive routine sample followed by two total coliform-positive repeat samples in the repeat sample set;

- (2) A system has a sample which is positive for fecal coliform or E. coli; or
- (3) A system fails the total coliform Maximum Contaminant Level (MCL) as defined in §64426.1.

(b) When the coliform levels specified in subsection (a) are reached or exceeded, the water supplier shall:

- (1) Contact the Department by the end of the day on which the system is notified of the test result or the system determines that it has exceeded the MCL, unless the notification or determination occurs after the Department office is closed, in which case the supplier shall notify the Department within 24 hours; and
- (2) Submit to the Department information on the current status of physical works and operating procedures which may have caused the elevated bacteriological findings, or any information on community illness suspected of being waterborne. This shall include, but not be limited to:
 - (A) Current operating procedures that are or could potentially be related to the increase in bacterial count;
 - (B) Any interruptions in the treatment process;
 - (C) System pressure loss to less than 5 psi;
 - (D) Vandalism and/or unauthorized access to facilities;
 - (E) Physical evidence indicating bacteriological contamination of facilities;
 - (F) Analytical results of any additional samples collected, including source samples;
 - (G) Community illness suspected of being waterborne; and
 - (H) Records of the investigation and any action taken.

Section 64426.1 of CCR states in relevant part:

(b) A public water system is in violation of the total coliform MCL [maximum contaminant level] when any of the following occurs:

- (1) For a public water system which collects at least 40 samples per month, more than 5.0 percent of the samples collected during any month are total coliform-positive; or
- (2) For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive; or
- (3) Any repeat sample is fecal coliform-positive or E. coli-positive; or
- (4) Any repeat sample following a fecal coliform-positive or E. coli-positive routine sample is total coliform-positive.

California Code of Regulations (CCR), Section 64463.4 states in relevant part:

(a) A water system shall give public notice pursuant to this section if any of the following occurs:

- (1) Any violation of the MCL, MRDL, and treatment technique requirements, except:
 - (A) Where a Tier 1 public notice is required under section 64463.1; or
 - (B) Where the Department determines that a Tier 1 public notice is required, based on potential health impacts and persistence of the violations;
- (2) All violations of the monitoring and testing procedure requirements in sections 64421 through 64426.1, article 3 (Primary Standards – Bacteriological Quality), for which the Department determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations;

...
 (b) A water system shall give the notice as soon as possible within 30 days after it learns of a violation or occurrence specified in subsection (a), except that the water system may request an extension of up to 60 days for providing the notice. This extension would be subject to the Department's written approval based on the violation or occurrence having been resolved and the Department's determination that public health and welfare would in no way be adversely affected. In addition, the water system shall:

- (1) Maintain posted notices in place for as long as the violation or occurrence continues, but in no case less than seven days;
- (2) Repeat the notice every three months as long as the violation or occurrence continues. Subject to the Department's written approval based on its determination that public health would in no way be adversely affected, the water system may be allowed to notice less frequently but in no case less than once per year. No allowance for reduced frequency of notice shall be given in the case of a total coliform MCL violation or violation of a Chapter 17 treatment technique requirement; and

...

(c) A water system shall deliver the notice, in a manner designed to reach persons served, within the required time period as follows:

- (1) Unless otherwise directed by the Department in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, **community water systems** shall give public notice by:
 - (A) Mail or direct delivery to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system; and
 - (B) Use of one or more of the following methods to reach persons not likely to be reached by a mailing or direct delivery (renters, university students, nursing home patients, prison inmates, etc.):
 1. Publication in a local newspaper;
 2. Posting in conspicuous public places served by the water system, or on the Internet; or
 3. Delivery to community organizations.

Section 64465 of the CCR states in relevant part:

(a) Each public notice given pursuant to this article, except Tier 3 public notices for variances and exemptions pursuant to subsection (b), shall contain the following:

- (1) A description of the violation or occurrence, including the contaminant(s) of concern, and (as applicable) the contaminant level(s);
- (2) The date(s) of the violation or occurrence;
- (3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through G;
- (4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in drinking water;
- (5) Whether alternative water supplies should be used;
- (6) What actions consumers should take, including when they should seek medical help, if known;
- (7) What the water system is doing to correct the violation or occurrence;
- (8) When the water system expects to return to compliance or resolve the occurrence;
- (9) The name, business address, and phone number of the water system owner, operator, or designee of the water system as a source of additional information concerning the public notice;
- (10) A statement to encourage the public notice recipient to distribute the public notice to other persons served, using the following standard language: —Please share this information with all the other people who drink this water, especially those who may not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail; and
- (11) For a water system with a monitoring and testing procedure violation, this language shall be included: —We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of

whether or not your drinking water meets health standards. During [compliance period dates], we [did not monitor or test or did not complete all monitoring or testing] for [contaminant(s)], and therefore, cannot be sure of the quality of your drinking water during that time.¶

...

(c) Each public notice given pursuant to this article shall contain information in Spanish regarding the importance of the notice, or contain a telephone number or address where Spanish-speaking residents may contact the water system to obtain a translated copy of the public notice or assistance in Spanish. For each non-English speaking group other than Spanish-speaking that exceeds 1,000 residents or 10% of the residents in the community served, whichever is less, the public notice shall:

- (1) Contain information in the appropriate language(s) regarding the importance of the notice, or
- (2) Contain a telephone number or address where such residents may contact the water system to obtain a translated copy of the notice or assistance in the appropriate language.

(d) Each public notice given pursuant to this article shall:

- (1) Be displayed such that it catches people's attention when printed or posted and be formatted in such a way that the message in the public notice can be understood at the eighth-grade level;
- (2) Not contain technical language beyond an eighth-grade level or print smaller than 12 point; and
- (3) Not contain language that minimizes or contradicts the information being given in the public notice.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene información muy importante sobre su agua potable.

Tradúzcalo o hable con alguien que lo entienda bien.

**State Coliform Standard Not Met for
City of Mt. Shasta – November 2014**

Our water system recently violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We routinely monitor for drinking water contaminants. In November 2014, routine water samples showed the presence of coliform bacteria. In accordance with State regulations, follow-up samples were taken which confirmed the presence of total coliform bacteria in the water. The standard is that no more than one sample per month may show the presence of total coliform bacteria. We took twelve samples in November and five tested positive for total coliform bacteria.

What should you do?

You do not need to boil your water or take other corrective actions.

This is not an emergency. If it had been, you would have been notified immediately. Total coliform bacteria are generally not harmful themselves. *Coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.*

Usually, coliform are a sign that there could be a problem with our treatment or distribution system (pipes). Whenever we detect coliform bacteria in any sample, we do follow-up testing and check for the presence of other bacteria of greater concern, such as fecal coliform or *E. coli*. **We did NOT find any fecal coliform or *E. coli* bacteria in any of our water samples.**

People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1 (800) 426-4791.

If you have other health issues concerning the consumption of this water, you may wish to consult your doctor.

What Happened? What Was Done?

Persons wishing more information should contact:

(name)

(address)

(phone number)

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

Appendix 3
Certification of Public Notification
(Community)

This form when completed and returned to the Division of Drinking Water (364 Knollcrest Drive, Suite 101, Redding, CA 96002 or fax to 530-224-4844), serves as certification that public notification to water users was completed as required by Title 22, California Code of Regulations, Sections 64463 - 64465.

Public Water System Name _____ **City of Mt. Shasta** _____

Public Water System No. _____ **4710008** _____

Public notification for the **November 2014 total coliform mcl violation** was performed by the following method(s) (check and complete those that apply):

_____ The notice was mailed to users on _____
A copy of the notice is attached.

_____ The notice hand delivered to water customers on _____
A copy of the notice is attached.

_____ The notice was published in the local newspaper on _____
A copy of the newspaper notice is attached.

_____ The notice was posted in the following conspicuous places:
A copy of the notice is attached.

Provide the date (or dates) that the notice was posted _____

_____ The notice was delivered to the following community organizations:
A copy of the notice is attached.

Provide the date (or dates) that the notice was delivered _____

I hereby certify that the above information is factual.

Printed Name

Signature

Date

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

This form is intended to assist public water systems in completing the investigation required by the California Department of Public Health (Section 64426(b) of Title 22, California Code of Regulations) and may be modified to take into account conditions unique to the system.

ADMINISTRATIVE INFORMATION

Entity Name: PWSID NUMBER:	Name	System Address & Email	Telephone Number
Operator in Responsible Charge (ORC)			
Person that collected TC samples if different than ORC			
System Owner			
Certified Laboratory for Microbiological Analyses			
Date Investigation Completed:			
Month(s) of Total Coliform MCL Failure:			

INVESTIGATION DETAILS

SOURCE	WELL (name)	WELL (name)	WELL (name)	WELL (name)	WELL (name)	COMMENTS (attach additional pages if needed)
1. Inspect each well head for physical defects and report						
a. Is raw water sample tap upstream from point of disinfection?						
b. Is wellhead vent pipe screened?						
c. Is wellhead seal watertight?						
d. Is well head located in pit or is any piping from the wellhead submerged?						
e. Does the ground surface slope towards well head?						
f. Is there evidence of standing water near the wellhead?						
g. Are there any connections to the raw water piping that could be cross connections? (describe all connections in comments)						
h. Is the wellhead secured to prevent unauthorized access?						
i. To what treatment plant (name) does this well pump?						
j. How often does the system take a raw water total coliform (TC) test?						
k. Provide the date and result of the last TC test at this location						
2. Inspect and review records for surface water source (if applicable)						
a. Have there been any events in the watershed or near the intake that might have contributed to TC+ or EC+ results? (Describe)						

TREATMENT

TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
1. If the system provides continuous chlorination treatment was there any equipment failure?					
a. Did the distribution system maintain chlorine residual?					
b. Was emergency chlorination initiated? If yes, for how long?					
c. Did the distribution system lose chlorine residual?					
2. If routine chlorination is not provided, was emergency chlorination initiated?					

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

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TREATMENT	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS
If Yes, when?						
3. Inspect each point where disinfectant is added and report						
a. Is the disinfectant feed pump feeding disinfectant?						
b. What is the feed rate of disinfectant in ml/minute?						
c. What is the concentration of the disinfectant solution being fed? (percent or mg/l of chlorine as HOCI)						
d. By what method was the concentration of solution determined? (ex: measured, manufacturer's literature)						
e. What is the age (days) of the disinfectant solution currently being used at this treatment location?						
f. What is the raw water flow rate at the point where disinfectant is added in gallons per minute?						
g. What is the total chlorine residual measured immediately downstream from the point of application?						
h. What is the free chlorine residual measured immediately downstream from the point of application?						
i. What is the contact time in minutes from the point of disinfectant application to the first customer?						

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site TC+ or EC+	Upstream Site	Downstream Site	Sample 4 (specify)
1. What is the height of the sample tap above grade? (inches)				
2. Is the sample tap located in an exterior location or is it protected by an enclosure?				
3. Is the sample tap threaded, have a swing arm (kitchen sink) or an aerator (sinks)?				
4. Is the sample tap in good condition, free of leaks around the stem or packing?				
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?				
6. Is the sample tap and areas around the sample tap clean and dry (free of animal droppings other contaminants or spray irrigation systems)?				
7. Is the area around the sample tap free of excessive vegetation or other impediments to sample collection?				
8. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.).				
9. Is this sample tap designated on the sampling plan submitted with this information request?				
10. What were the weather conditions at the time of the positive sample (rainy, windy, and sunny)?				

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

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STORAGE	TANK (name)	TANK (name)	TANK (name)	TANK (name)	COMMENTS
1. Is each tank locked to prevent unauthorized access?					
2. Are all vents of each tank screened down-turned to prevent dust and dirt from entering the tank?					
3. Is the overflow on each tank screened?					
4. Are there any unsealed openings in the tank such as access doors, water level indicators hatches, etc.?					
5. Is the roof/cover of the tank sealed and free of any leaks?					
6. Is the tank above ground or buried?					
a. If buried or partially buried, are there provisions to direct surface water away from the site.					
b. Has the interior of the tank been inspected to identify any sanitary defects, such as root intrusion?					
8. Does the tank "float" on the distribution system or are there separate inlet and outlet lines?					
9. What is the measured chlorine residual (total/free) of the water exiting the storage tank today ?					
10. What is the volume of the storage tank in gallons?					
11. Is the tank baffled?					
12. Prior to the TC+ or EC+, what was the previous date item #1-7 were checked and documented?					

DISTRIBUTION SYSTEM	SYSTEM RESPONSES
1. What is the minimum pressure maintained in the distribution system?	
2. Did pressure in the distribution system drop to less than 5 psi prior to positive bacti?	
3. Has the distribution system been worked on within the last week? (taps, hydrant flushing, main breaks, mainline extensions, etc.) If yes, provide details.	
4. Are there any signs of excavations near your distribution system not under the direct control of your maintenance staff?	
5. Has the distribution system been inspected to check for mainline leaks? Is there or has there been a mainline leak?	
6. If there was a mainline leak, when was it repaired?	
7. On what date was the distribution system last flushed?	
8. Is there a written flushing procedure you can provide for our review?	
9. Do you have an active cross-connection control program?	
10. What is name & phone number of your Cross-Connection Control Program Coordinator?	
11. Is the review and testing of backflow prevention devices current?	
12. On what date was the last physical survey of the system done to identify cross-connections?	

APPENDIX 4. POSITIVE TOTAL COLIFORM INVESTIGATION

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BOOSTER STATION	Response
1. Does the system have a booster pump? How many?	
2. Does the system have a standby booster pump if the main pump fails?	
3. Prior to bacteriological quality problems, did the booster pump fail?	
4. Do you notice standing water, leakage at the booster station?	

GENERAL OPERATIONS:	Response
1. Where there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC + findings?	
2. Where there any main breaks, water outages, or low pressure reported in the service area where TC+ or EC+ samples were located.	
3. Does the system have backup power or elevated storage?	
4. During or soon after bacteriological quality problems, were any complaints received of any customers' illness suspected of being waterborne? How many?	
5. What were the symptoms of illness in received complaints about customers being sick?	

ADDITIONAL INFORMATION TO BE SUBMITTED WITH RESPONSES TO THE ABOVE QUESTIONS

1. **Sketch** of System showing all sources, treatment locations, storage tanks, microbiological sampling sites and general layout of the distribution system including the location of all hazardous connections such as the wastewater treatment facility.
2. A set of photographs of the well, pressure tanks, and storage tanks in the system may be submitted if they would show that the contamination is directly related and changes have been made since the last inspection by our Department
3. Name, certification level and certificate number of the Operator in Responsible Charge.
4. Copy of the last cross connection survey performed that identifies the location of all unprotected cross connections.
5. Updated source water assessment(s) (DWSAP) if there have been changes to well construction or potentially contaminating activities (PCA list) since last inspection.

SUMMARY: BASED ON THE RESULTS OF YOUR INVESTIGATION AND ANY OTHER INFORMATION AT YOUR DISPOSAL, WHAT DO YOU BELIEVE TO BE THE CAUSE OF THE POSITIVE TOTAL COLIFORM SAMPLES FROM YOUR PUBLIC WATER SYSTEM?

CERTIFICATION: I CERTIFY THAT THE INFORMATION SUBMITTED IN RESPONSE TO THE QUESTIONS ABOVE IS ACCURATE TO THE BEST OF MY PROFESSIONAL KNOWLEDGE

NAME: _____ TITLE: _____ DATE: _____